

- 23) A first and a second electrode for use in a diode device, each electrode having a surface for positioning facing the other electrode, wherein said surfaces are substantially flat and wherein topographical features of one electrode surface match topographical features of the other electrode surface.

Please append new claims 66 to 69 as follows:

- 66) The apparatus of claim 1 wherein said distance separating said emitter electrode and said collector electrode is sufficiently small for electrons to tunnel from said emitter electrode to said collector electrode.
- 67) The apparatus of claim 13 wherein said distance separating said emitter electrode and said collector electrode is sufficiently small for electrons to tunnel from said emitter electrode to said collector electrode.
- 68) The apparatus of claim 15 wherein said distance separating said emitter electrode and said collector electrode is sufficiently small for electrons to tunnel from said emitter electrode to said collector electrode.
- 69) The apparatus of claim 17 wherein said distance separating said emitter electrode and said collector electrode is sufficiently small for electrons to tunnel from said emitter electrode to said collector electrode.

REMARKS

CLAIM REJECTION - 35 USC 102.

Claims 1, 2 and 7 stand rejected under 35 USC 102(b) as being clearly anticipated by Kennel (US 5410166). Claims 1, 2, 4, 7, 23 and 24 stand rejected under 35 USC 102(b) as being clearly anticipated by Hatsopoulos and Gyftopoulos (H&G). Claims 1, 2, 8, 10, 13-16, 23, 24 and 27 stand rejected under 35 USC 102(e) as being clearly anticipated by DiMatteo (US 6084173). Claims 23 and 28 stand rejected under 35 USC 102(e) as being clearly anticipated by Rason et al (US 3843896). Claims 1, 2, 7-10, 13, 14, 23, 24, 27, 50, 53 and 61 stand rejected under 35 USC 102(b) as being clearly anticipated by Fitzpatrick et al ("Close-Spaced Thermionic Converters with Active Spacing Control and Heat Pipe Isothermal Emitters").